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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,895	09/10/2003	Stephen Craig Gleckner	SPS-0081	3188

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WOODCOCK WASHBURN LLP
ONE LIBERTY PLACE, 46TH FLOOR
1650 MARKET STREET
PHILADELPHIA, PA 19103

EXAMINER

BARRERA, RAMON M

ART UNIT PAPER NUMBER

2832

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,895

Applicant(s)

GLECKNER, STEPHEN CRAIG

Examiner

Ramon M Barrera

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/28/03
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 36, "said cylindrical core" lacks antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 4, 6, 14, 16, 17, 19, 29, 31, 32 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyata.

Miyata in Figs 1-2 discloses ferritic magnet layer 14 superposed upon rare earth magnet (NdFeB) layer 12. As disclosed in Applicant's specification, the recited "the magnetic field of the layered magnet in the direction outward from the normal to the layer of ferritic magnet being substantially more uniform than the magnetic field in said direction exhibited by the rare earth magnet alone" is inherent to the combined magnets. Additional layers of ferritic and rare earth magnetic material lie adjacent to any given layered magnet. Fig. 7 discloses "the

step of superposing upon said layered magnet an additional layer of magnetic material bonded thereto". It is noted that the rotational orientation of Miyata's cylindrical magnets is irrelevant to Miyata's invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8, 10, 11, 12, 18, 21, 23-26, 28, 33, 37, 39 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata in view of Toyoshima, et al.

Miyata fails to disclose a cylindrical core. Toyoshima discloses cylindrical nonmagnetic core 38 for the purpose of NMR imaging. Since Miyata and Toyoshima are both from the same field of endeavor, the purpose disclosed by Toyoshima would have been recognized in the pertinent art of Miyata. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ a cylindrical core for the purpose of NMR imaging. It is noted that the nonmagnetic core constitutes superposing upon said layered magnet an additional layer of nonmagnetic material.

7. Claims 2, 5, 7, 20, 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata in view of Baermann('282), cited on Applicant's IDS.

Miyata fails to disclose a bonding layer or magnets comprising a binder.

Baermann discloses a pair of ferritic and rare earth magnets, comprising a plastic binder, bonded via a nonmagnetic bonding layer (Z_1), an equivalent structure/magnetic material known in the art. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ plastic bound magnet material and bind the magnets in Miyata's invention via a bonding layer for this was known to be an equivalent structure known in the art. This bonding layer inherently constitutes an additional layer of non-magnetic material.

8. Claims 9, 13, 22, 27, 38 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata in view of Toyoshima, et al., and further in view of Baermann('282).

Miyata in view of Toyoshima fails to disclose a bonding layer or magnets comprising a binder. Baermann discloses a pair of ferritic and rare earth magnets, comprising a plastic binder, bonded via a nonmagnetic bonding layer (Z_1), an equivalent structure/magnetic material known in the art. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ plastic bound magnet material and bind the magnets in Miyata in view of Toyoshima's invention via a bonding layer for this was known to be an equivalent structure known in the art. This bonding layer inherently constitutes an additional layer of non-magnetic material.

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9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata in view of Applicant's admitted prior art.

Miyata failed to disclose wherein the ferritic and rare earth magnet are superposed by co-extrusion, compression molding, calendaring, injection molding, or combinations thereof. Applicant's admitted prior art on page 6, paragraph 32, states "the magnetic material may be joined by any means known in the art to permanently or releasably join magnetic material such as for example by magnetic bonding, melt bonding techniques, injection molding techniques, compression molding techniques, extrusion molding techniques, calendaring techniques, and calendaring methods". Therefore, because the stated methods of superposing magnets were art-recognized methods at the time the invention was made, one of ordinary skill in the art would have found it obvious to employ said methods in Miyata.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramon M Barrera whose telephone number is (571)272-1987. The examiner can normally be reached on Monday through Friday, except Wed., from 9 to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571)272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ramon M Barrera
Primary Examiner
Art Unit 2832

rmb